Appeal No. 2015-1562 (Reexamination Serial No. 90/012,469)

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

IN RE MAN MACHINE INTERFACE TECHNOLOGIES LLC APPELLANT

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board

BRIEF FOR APPELLEE – DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

THOMAS W. KRAUSE Acting Solicitor

JEREMIAH S. HELM FARHEENA Y. RASHEED Associate Solicitors

Mail Stop 8 P.O. Box 1450 Alexandria, VA 22313-1450 (571) 272-9035

Attorneys for the Director of the United States Patent and Trademark Office

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STATEMENT OF RELATED CASES

The Director is unaware of any other appeal from the Patent Trial and Appeal Board (Board) for the United States Patent and Trademark Office (USPTO) in connection with this patent reexamination that has previously been before this Court. The Director is also unaware of any other cases pending in this or any other court that will directly affect, or be directly affected, by the Court's decision in this appeal.

I. STATEMENT OF THE ISSUES

Appellant Man Machine Interface Technologies LLC (Man Machine) claims a device used by a human to select items from a screen – in other words a device that performs the function of a mouse or remote control. The Examiner rejected claims 1, 4, 7-10, and 17 as either anticipated or obvious over the prior art, which disclosed a device used by a human to select items from a screen. Man Machine appealed to the Board, which affirmed. The issues in this appeal are: (1) does substantial evidence support the Board's finding that claim 1 is anticipated by the prior art and (2) did the Board err when it concluded that claims 1, 4, 7-10, and 17 are obvious in view of the prior art.

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II. STATEMENT OF THE CASE

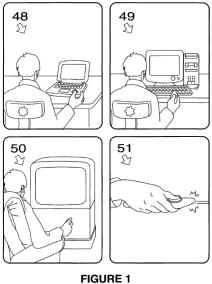
This case involves U.S. Patent No. 6,069,614 ('614 patent). A24-42. The '614 patent is entitled "Man Machine Interface Via Display Peripheral," and is generally directed to a device that allows a user to interface with information on a screen. The patent explains that the disclosed "remote control device" allows a human to interface with, among other things, a "computer, television, electronic games and appliances." A24 (Abstract). Reexamination was requested by a third party. A1630-1851. The Examiner granted reexamination and rejected claim 1 as anticipated under 35 U.S.C. § 102(b) and claims 1, 4, 7-10, and 17 as obvious under 35 U.S.C. § 103. A2417-54. All of the rejections were made in view of the Japanese reference, Japanese Patent Laid-Open No. Sho JP 58-219634 (JP '634, A141-56). A5-6. The Board affirmed. A1-23. This appeal followed.

A. The '614 patent

The '614 patent was filed September 16, 1996 as a continuation in part of U.S. Application No. 08/433,922. A24-42. The '614 patent explains that "there is a need for an improvement in man machine interface as it relates to the selection of choices on computers, [t]elevisions and other such devices." A34 col.1 ll.39-41. Figure 1 of the '614 patent (A25, reproduced below) illustrates some of the different uses of the disclosed device: in a laptop computer (48) in a desktop

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computer (49), in conjunction with a television (50), and in conjunction with an electronic game or appliance (51). A36 col.5 ll.53-65.



Much of the disclosed device is acknowledged to be well known in the prior art. See generally A37 col.7 ll.13-33 (describing aspects of the invention commonly known in the art). This includes the LED or LCD display window; the logic circuit and memory; and the transmitting means. Id.; see also A37 col.7 ll.66-67 (disclosing well-known prior art spring mechanism used to actuate the remote control device). As described in the specification, the advantage over the prior art is that "a user would employ a casual and relaxed attitude as the remote control device is not desk and therefore position bound by where it is placed on the desk" because the device is "held in the user's left or right hand." A35 col.4 ll.33-

39. The specification claims that the disclosed device also has the advantage of a different method of operation with "pressure sensitive digital contacts enabling precise and rapid rate sensitive cursor movement." A35 col.4 ll.40-52.

In contrast to this disclosure, however, the '614 patent's claims are much broader. Claim 1 is generally illustrative of the claims at issue in this appeal.

Claim 1 (A4-5) reads:

1. A remote control device adapted for use by a human to control and select from a screen, the screen including a plurality of choices and a cursor, the remote control device comprising:

a body adapted to be held by the human hand, the body having a top side and a bottom side;

a thumb switch positioned on the top side of the body, the thumb switch being adapted for activation by a human thumb, the thumb switch being adapted to perform multiple functions;

wherein the thumb switch includes a center switch, an annular switch, and a cover plate, the annular switch including only four switches and the cover plate covers the four switches, wherein the annular switch surrounds the center switch, the annular switch being adapted to operate independently from the center switch;

wherein the annular switch is adapted to effect movement of the cursor between the plurality of choices and the center switch is adapted to effect selection of one of the choices identified by the cursor;

electronic means adapted to generate a signal upon activation of one of the switches; and Case: 15-1562 Document: 24 Page: 10 Filed: 07/27/2015

transmitting means for transmitting the signal from the electronic means.

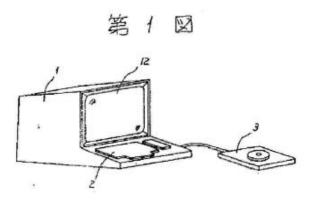
In short, claim 1 is directed to a device that can be held by the human hand, where the annular switch includes four switches that surround the center switch, and can be used to control cursor movement. A36 col.5 l.66-col.6 l.4. The device generates and transmits an electronic signal. Unlike the preferred embodiment disclosed in the specification, there is no limitation regarding how the device must be held, or the user's "casual and relaxed attitude" when using the device.

B. The prior art JP '634 application discloses a hand held device for moving a cursor position on a display screen using an annular switch and a center button

All of the claims at issue are rejected over the JP '634 reference, as either anticipated (claim 1) or obvious in view of JP '634, alone or in combination with other references (claims 1, 4, 7-10, and 17). On appeal, Man Machine does not dispute the disclosure of the prior art, and instead primarily disputes the Board's claim construction as it pertains to that disclosure. To the extent Man Machine raises any factual disputes regarding the prior art, see Man Machine Br. 22-29, it focuses exclusively on the JP '634 art. The Director likewise focuses on the JP '634 art.

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The JP '634 prior art is a 1982 patent application entitled "Cursor Moving Key Switch." A147-56. JP '634 seeks to solve the problem of "smoothly mov[ing] a cursor." A147. It does this by disclosing "a very convenient cursor moving key switch" with a separate "cursor locking key at a substantially central portion." A148. The disclosed input device (3) is illustrated in JP '634 Figure 1 connected to a computer system.

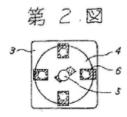


JP '634 Figure 1 (A154)

The configuration of the disclosed cursor moving device is shown in more detail in Figure 2 (below). Like the device claimed in the '614 patent, the "cursor moving key" disclosed in JP '634 moves a cursor on the screen horizontally or vertically based on a cross-like configuration of sensors that translates pressure into horizontal or vertical movement on the screen. A149-51; see also A155-56 (Figures 6 & 7, illustrating the movement of the cursor on-screen in response to pressure). Likewise, the "cursor locking key" (5) is positioned in the middle of the

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device, and is used to send a signal indicating the position of the cursor – in other words, to select that particular position on the screen for storage and use by the CPU. A151-52.



JP '634 Figure 2 (A154)

In sum, JP '634 discloses a remote control device used to move a cursor on a screen. The device includes an annular switch made up of four switches ("cursor moving keys") that control the movement of a cursor in response to pressure.

These switches operate independently from a center switch ("cursor locking key"); the center switch is used to select and send inputs to a computer regarding the location of the cursor on a screen. The entire device is illustrated as small, roughly the size of a mouse, and is operated by hand.

C. The Examiner's rejection and the Board's decision

The Examiner rejected claims 1, 4, 7-10, and 17 of the '614 patent as anticipated (claim 1) or obvious (claims 1, 4, 7-10, and 17) in view of JP '634. A2147-53. The Examiner's rejection was, generally, for the same reasons

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identified by the requester in its request for reexamination. A2420-54; see also A1630-81 (request) & A1704-09 (claim chart for JP '634).

The Examiner found that JP '634 teaches all the elements of claim 1.

A2420. The Examiner specifically rejected the patent owner's argument that the Examiner "disregard[ed] functional limitations" in the claim, namely the limitation that the device is either "adapted to be held by the human hand" or a "hand held device." A2425-26. The Examiner explained that these limitations were not disregarded, but, instead, the limitations simply failed to exclude the prior art: under the broadest reasonable interpretation, "adapted to be held by the human hand" did not require any of the particular structural limitations advanced by Man Machine. Instead, the Examiner concluded, the device "includes forms of grasp or grasping by a user's hand or at least the breadth of the functional manner of use being 'handheld'". A2426.

Thus, contrary to Man Machine's argument that the "hand held" limitation required some sort of specific structural adaptation beyond the ability to function as a hand held device, the Examiner adopted the position that the scope of the claim included devices that can be operated while held by the human hand.

^{1.} Man Machine does not distinguish between these two limitations in this appeal.

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A2426-27. The Examiner found the argument that the limitation "hand held" required an "ergonomic" form unconvincing, explaining that no facts supported this construction and the plain language of the claim did not include any such limitation. A2437.

The Examiner also rejected Man Machine's argument that a "thumb switch" requires a particular configuration absent in the prior art. As the Examiner explained, the limitation "thumb switch" included within its scope switches that could be triggered by the thumb or, alternatively, other digits as well. A2427; see also A2431 (finding prior art switch could be triggered with thumb or other fingers). The Examiner found no indication that the claim term thumb switch required anything more. Id. Finally, the Examiner also rejected a variety of other arguments from Man Machine, including that JP '634 is non-analogous art. The Examiner pointed out that the JP '634 reference was – like the '614 patent – directed to a man-machine interface device. A2432-33. The Examiner also explained that there was no evidence that holding the device disclosed in JP '634 (which is described as operated by a human hand) somehow rendered it unsatisfactory for its intended purpose. A2442. In short, the Examiner concluded that the device disclosed in JP '634 was adapted to be held by the human hand during use.

Man Machine appealed to the Board, which affirmed. A1-23. The Board incorporated the Examiner's Answer into its opinion and provided additional discussion regarding "specific findings and arguments . . . for emphasis." A7. In light of Man Machine's arguments, which focused on the JP '634 reference, the Board treated claim 1 as representative. A7.

With respect to claim construction, the Board found that the Examiner did not ignore any "structural implications" inherent in the claim terms "adapted to be held by the human hand" and "thumb switch." A10. The Board applied the broadest reasonable interpretation of the claim terms, A10-11, and found no definition for these terms in the specification "that would preclude the Examiner's broader reading." A11. As such, the Board concluded that a device held by the human operator's hand during use – such as the device disclosed in JP '634 – fell within the scope of the claims. A11-12. The Board further found that the cursor moving key and cursor locking key disclosed in JP '634 fall within the scope of the

^{2.} Man Machine criticizes the Board for incorporating the Examiner's Answer into its analysis. Man Machine Br. 5. This practice, however, is explicitly contemplated by 37 C.F.R. § 41.50(a)(1), which provides: "The Board, in its decision, may affirm or reverse the decision of the examiner in whole or in part on the grounds and on the claims specified by the examiner. The affirmance of the rejection of a claim on any of the grounds specified constitutes a general affirmance of the decision of the examiner on that claim, except as to any ground specifically reversed."

claimed "thumb switch." A12. The Board rejected Man Machine's argument that the claimed subject matter is limited to a "device that is ergonomically operated by the thumb," because no such limitation is present in any claim. A12-13.

With respect to Man Machine's obviousness arguments, the Board found that JP '634 was analogous art because it, like the claims at issue, is concerned with a "man-machine interface device." A14. The Board also found that there was no evidence that using the device of JP '634 as a hand held device would change its intended purpose. A14-15. Likewise, the Board found there was no teaching away from the claimed invention in JP '634 because, at most, it merely discloses an alternative arrangement. A16. Instead, the Board found that any change in form "is simply a combination of known teachings that realize a predictable result." A16. Finally, the Board concluded that Man Machine's evidence of commercial success and long-felt need were unsupported by any evidence demonstrating a nexus between the success and the claimed invention. A17-19. The Board thus affirmed the Examiner's rejection of claims 1, 4, 7-10, and 17.

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III. SUMMARY OF THE ARGUMENT

Substantial evidence supports the Board's findings, and there is no legal error in its conclusion that claims 1, 4, 7-10, and 17 are unpatentable in view of the prior art. The prior art discloses a device used to select information on a screen, with the same arrangement of input switches as is claimed in the '614 patent. While the prior art device has a different shape than the device disclosed in the '614 patent, it nevertheless falls within the broad scope of the representative claim. Man Machine alleges error in the construction of the claim terms "adapted to be held by the human hand" and "thumb switch," and asserts that these terms inherently require an ergonomic configuration that it believes is absent in the prior art. Yet there is no intrinsic evidence supporting this construction, and the claims themselves do not require a particular configuration. The Board reasonably construed the claims, and substantial evidence supports its findings that the prior art JP '634 device anticipates or renders obvious the claims at issue. The Board's decision should be affirmed.

IV. ARGUMENT

A. The standard of review

Man Machine bears the burden to "not only show the existence of error, but also show that the error was in fact harmful because it affected the decision

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below." <u>In re Watts</u>, 354 F.3d 1362, 1369 (Fed. Cir. 2004). This Court reviews the Board's factual determinations for substantial evidence, and reviews legal conclusions <u>de novo</u>. <u>In re Gartside</u>, 203 F.3d 1305, 1315-16 (Fed. Cir. 2000). Substantial evidence is "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." <u>Consol. Edison Co. v. NLRB</u>, 305 U.S. 197, 229 (1938). "[W]here two different, inconsistent conclusions may reasonably be drawn from the evidence in record, an agency's decision to favor one conclusion over the other is the epitome of a decision that must be sustained upon review for substantial evidence." In re Jolley, 308 F.3d 1317, 1329 (Fed. Cir. 2002).

Anticipation is a question of fact. <u>In re Hyatt</u>, 211 F.3d 1367, 1371-1372 (Fed. Cir. 2000). Whether an invention would have been obvious is a question of law based on underlying factual determinations. <u>Gartside</u>, 203 F.3d at 1316. What a reference discloses is a question of fact. <u>Para-Ordnance Mfg., Inc. v. SGS</u>

<u>Importers Int'l, Inc.</u>, 73 F.3d 1085, 1088 (Fed. Cir. 1995). The Board construes claims consistent with their broadest reasonable interpretation; this Court reviews that construction to determine whether it is reasonable in light of all the evidence before the Board. <u>In re ICON Health & Fitness, Inc.</u>, 496 F.3d 1374, 1379 (Fed. Cir. 2007); In re Acad. of Science Tech Ctr., 367 F.3d 1359, 1364 (Fed. Cir. 2004).

B. The Board correctly found claim 1 anticipated, and claims 1, 4, 7-10, and 17 obvious in view of the JP '634 prior art

1. But for the parties' dispute over the interpretation of the terms "adapted to be held by the human hand" and "thumb switch", JP '634 would anticipate claim 1

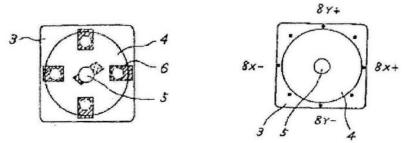
The Board affirmed the Examiner's finding of claim 1 as anticipated by the JP '634 application. The Board also affirmed the Examiner's rejection of claims 1, 4, 7-10, and 17 as obvious in view of the JP '634 prior art, as well as other references. In its briefing to this Court, Man Machine does not argue any claims separately, and instead focuses on claim 1 as representative of the claims and issues on appeal. See Man Machine Br. at 29 (advancing no separate argument for the obviousness rejections). As such, Man Machine has waived any arguments related to other claim limitations by failing to raise them in its opening brief. See, e.g., Advanced Magnetic Closures, Inc. v. Rome Fastener Corp., 607 F.3d 817, 833 (Fed. Cir. 2010) ("This court has consistently held that a party waives an argument not raised in its opening brief."); SmithKline Beecham Corp. v. Apotex Corp., 439 F.3d 1312, 1319 (Fed. Cir. 2006) ("Our law is well established that arguments not raised in the opening brief are waived."). Accordingly, the Director also focuses on claim 1 and treats it as representative of the claims at issue on appeal.

In its decision, the Board relied on the Examiner's factual findings, as stated in the Examiner's Answer. A7. The Examiner found that JP '634 discloses a

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device that fell within the scope of claim 1. A2420. The Examiner found that JP '634 discloses a device, which includes a cursor moving key switch for moving a cursor on a display screen. A1658. The cursor is moved by applying pressure to one of four switches, each of which is assigned to one of four directions (up, down, left, and right). A1658. In addition, the JP '634 device has an independent central switch (cursor locking key), surrounded by the directional switches, which allows a user to select the cursor position displayed on the screen. A1658. The Examiner found that this disclosure anticipates claim 1. The Board agreed. Substantial evidence supports these findings.

JP '634 clearly displays a remote control device, used to control the position of a cursor on a screen. For example, JP '634 Figure 1 shows the control device connected to a computer terminal. A154. JP '634 also explains that the control device body is designed to be operated by hand, and positioning of the cursor on screen is controlled by the hand's pressure on the spring contact. A150. The device also includes a switch – including an annular switch and a center switch – that performs multiple functions. As shown in JP '634 Figure 2, there are four directional switches that control the movement of the cursor in response to pressure. A154. The directionality of cursor movement is shown in Figure 7.



JP '634 Figures 2 (left) and 7 (right)

JP '634 explains that the device operates by sensing the depression of these switches and controlling the movement of the cursor on the screen as a result.

A150-51. The central "cursor locking switch" is positioned in the middle of the directional switches, and is used to select the position of the cursor. A151.

Selecting the cursor position commands the attached computer to carry out the user's desired functions; the example from JP '634 is drawing a line between the selected points on the screen. A151-52. Man Machine does not dispute any of these findings, and instead focuses entirely on the Board's claim construction. As such, if this Court concludes the Board's claim construction is consistent with the broadest reasonable interpretation of the claims, the anticipation rejection should also be affirmed.

2. The Board reasonably construed "adapted to be held by the human hand" and "thumb switch" to encompass the '634 device

On appeal, Man Machine does not materially dispute the Board's findings with respect to the content of the prior art. Instead, Man Machine argues that the

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Board erred in its claim construction, and because of this error Man Machine asserts the Board incorrectly found that JP '634 disclosed the hand held and thumb switch limitations. See generally Man Machine Br. 15-29 (arguing for de novo review based on the Board's claim construction). Man Machine's claim construction arguments are unavailing.

Man Machine argues that the Board incorrectly understood the limitation "adapted to be held by the human hand" to include within its scope anything that could be held within the human hand. Man Machine Br. 15-19. This argument, however, rests upon a false premise: the Board's claim construction was not so broad as to be nonsensical. Instead the Board explained that the plain meaning of "adapted to be held by the human hand" included within in its scope "various forms of grasp by a human hand, such as the grasping of the mouse disclosed in JP '634." A10. Likewise, the Board understood the term "thumb switch" to be broad enough to include a switch that could also be activated by another digit, as long as it is also able to be operated by a user's thumb. A10.

The '614 patent specification supports the Board's construction. See, e.g., A34 col.2 ll.30-31 ('hand held body' modified by "elongated''); A34 col.2 ll.14-26 (defining characteristic of a "thumb switch" is ability to be used by a thumb). As an initial point, there is no limitation that requires any particularly shaped hand

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held body: the '614 patent claims are not directed to a particular shape or ergonomic configuration of a device. Instead, the specification explains that "[p]referably, the control device . . . is an <u>elongated</u> hand held body shape" (A34 col.2 ll.30-31, emphasis added) – in other words, the specification acknowledges that a hand held device could come in many shapes, including but not limited to the elongated shape shown in the patent. Both the plain meaning of the term "hand held" and the way the term is used in the '614 specification indicate it is a broad term not limited to any particular shape or configuration.

Likewise the specification uses the term "thumb switch" in the same way as the Board, namely to mean a switch that can be triggered by the thumb. The specification explains that the "multi-function switch performs three separate functions." A34 col.2 ll.5-6. These include "a center push switch . . . activated by applying thumb pressure," "an annular switch . . . activated by applying thumb pressure," "and a cursor movement rate, activated by the degree of thumb pressure." A34 col.2 ll.16-26. Thus, the defining characteristic of a thumb switch, according to the disclosure, is that it can be activated by thumb pressure. The device of JP '634 falls within the scope of the claims.

In support of its argument that the specification "consistently and unequivocally illustrates and describes the body of the remote as being only held in

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the hand," Man Machine only cites Figures 1 and 2a for support. Man Machine Br. 19. Those figures, however, illustrate a preferred embodiment, one with an "elongated" hand held body. A34 col.2 ll.30-31, see also A36 col.5 ll.21-22 (figure shows "one version" of the device). The specification is clear that "the appended claims should not be limited to the description of the preferred versions contained" in the specification. A39 col.11 ll.1-3. There is no reason to read these limitations into the plain language of the claims.

Instead of intrinsic evidence, Man Machine cites unrelated cases dealing with different inventions. Man Machine Br. 15-25. These cases amount to attorney argument, and are not evidence of how one skilled in the art would understand the claims at issue. The Board correctly used a broad but reasonable construction of the claims in reaching its decision on patentability, and its findings are sound. See In re NTP, Inc., 654 F.3d 1268, 1274 (Fed. Cir. 2011) (In reexamination, claims are given the broadest reasonable interpretation consistent with the specification.). The Board's rejection should be affirmed.

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3. The Board correctly concluded claims 1, 4, 7-10, and 17 are obvious

Even under a narrower construction, the Board's obviousness rejections must nevertheless be affirmed.³ The Board found that it was an obvious and routine design choice to incorporate the switch configuration found in JP '634 into a remote control device analogous to that disclosed as the preferred embodiment in the '614 patent. A16-17 & A20-21; see also, e.g., A2421 (Examiner's answer rejecting claims over Florin in combination with JP '634) & A1719-28 (claim charts incorporated by Examiner into answer). The Board correctly concluded that claims 1, 4, 7-10, and 17 are obvious in view of the JP '634 reference alone or in combination with the prior art.

Substantial evidence supports the Board's finding that the claimed invention is so close to the device disclosed in JP '634 that even under Man Machine's narrower construction it amounts to a routine modification, particularly in view of the other cited prior art. See, e.g., U.S. Patent 5,594,509 (Florin) (A220-288) (disclosing a hand held remote control device used to select images on a screen); see also A2421 (Examiner's answer rejecting claims over Florin in combination

^{3.} As an initial point, the factual determinations made by the Board in its anticipation decision apply equally to the obviousness determination, and are supported by substantial evidence for the same reasons. Likewise, the claim construction applied by the Board is correct for the same reasons.

with JP '634) & A1719-28 (claim charts incorporated into Examiner's Answer). Indeed, the remote control in Florin Figure 1 (A222, shown below) discloses a device highly analogous in form to the preferred embodiment described in the patent, which Man Machine claims is a hand held device specifically designed for thumb-operated selection.



Florin Figure 1 (in part, A222)

JP '634, either alone or in combination with other cited art such as Florin, gives rise to a strong prima facie case of obviousness. In light of the prior art and the Board's well supported findings, it is unsurprising that Man Machine fails to address the substance of these obviousness rejections whatsoever on appeal. See Man Machine Br. 29 (relying entirely on a claim construction argument). Instead, Man Machine raises only unsupported attorney arguments in an attempt to

establish that the man-machine interface disclosed in JP '634 is so different from the claimed man machine interface as to be in an entirely different field of art.⁴

Man Machine claims that the Board's obviousness rejections rely on a misuse of the JP '634 device, but it points to no evidence in support of this position. Man Machine Br. 26-27. Instead, Man Machine asserts that the JP '634 disclosure that the device positions the central key so that contact with the user's finger "occurs least frequently" amounts to an absolute prohibition on finger (or thumb) contact with the switches. This understanding of the prior art is untenable. The JP '634 device is clearly designed to be operated by hand. See A150 (device switches pressed by user's hand). The fact that the JP '634 device positions the central key in a place where contact with the user's finger "occurs least frequently"

^{4.} With respect to Man Machine's misuse, analogous art, and teaching away arguments, the Board found that there was no evidence – only attorney argument – to support Man Machine's position. A12-17. In contrast, as discussed above, the Board's findings that JP '634 discloses a man-machine interface device with the claimed switch arrangement, designed to be used by a human hand, are supported by the reference itself. These findings undercut Man Machine's arguments with respect to misuse, analogous art, or teaching away; Man Machine's attorney argument cannot take the place of factual evidence in these determinations. See In re Geisler, 116 F.3d 1465, 1470 (Fed. Cir. 1997) ("[A]ttorney argument [is] not the kind of factual evidence that is required to rebut a prima facie case of obviousness."); cf. Invitrogen Corp. v. Clontech Labs., Inc., 429 F.3d 1052, 1068 (Fed. Cir. 2005) (Attorney argument regarding evidence alone is insufficient because "[u]nsubstantiated attorney argument regarding the meaning of technical evidence is no substitute for competent, substantiated expert testimony.").

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simply reflects the desire to avoid "mis-clicks" of the central button when using the surrounding cursor moving key. See A148 (central key is located at the position where "the operation state of the cursor moving key is least and the contact of a finger or the like occurs least frequently"). Indeed, JP '634 explains: "the reason why the cursor locking key 5 is provided at a substantially central portion of the cursor moving key 4 is that, where the cursor is to be operated using the cursor moving key 4, the portion described is a place at which the operation state is least frequently established and the contact of a finger occurs least frequently." A151. Avoiding inadvertent contact with the central key, while using the cursor-movement keys, is not an absolute prohibition on using a finger or thumb to operate the device. Cf. A150 (describing the JP '634 device as being operated by a hand).

Man Machine's teaching away argument is likewise unsupported by the evidence. "What the prior art teaches, whether it teaches away from the claimed invention, and whether it motivates a combination of teachings from different references are questions of fact." In re Fulton, 391 F.3d 1195, 1199-1200 (Fed. Cir. 2004). It is well established that the "mere disclosure of alternative designs does not teach away." Id. at 1201. Instead, in order to teach away, the prior art must "criticize, discredit, or otherwise discourage" one skilled in the art from

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pursuing the claimed invention. Id.; see also Ricoh Co. v. Quanta Computer, Inc., 550 F.3d 1325, 1332 (Fed. Cir. 2008) (same). There is nothing in JP '634 that criticizes, discredits, or otherwise discourages the use of a finger or thumb to control the on-screen cursor (to the contrary, a device operated by the user's hand like the device in JP '634 explicitly contemplates the use of fingers and/or the thumb). Instead, it simply arranges the requisite switches in exactly the same way as the claims at issue in order to avoid inadvertent contact during use, albeit in a differently shaped body. Likewise, there is nothing in JP '634 that discourages the use of a different shaped body, or otherwise undermines the Board's finding that it would be a routine design choice to use the switch configuration disclosed in JP '634 in, e.g., the remote control device disclosed in Florin.

Man Machine's argument that the device disclosed in the JP '634 art would not be an infringing equivalent, Man Machine Br. 28-29, is irrelevant to the teaching away inquiry, unsupported by any factual evidence, and based upon an unpersuasive analogy to an anticipation rejection. Simply put, whether or not the JP '634 device would infringe by equivalents is irrelevant to the obviousness analysis, which allows commonsense modifications made in light of the knowledge of one skilled in the art as well as the disclosure of other prior art references. KSR Light Co. v. Teleflex, Inc., 550 U.S. 398, 418 (2007). Finally, although Man

Machine does not materially pursue this argument on appeal, JP '634 is clearly analogous art as it is within the same field of endeavor, namely the use of a manmachine interface device to control and select objects on a screen. A147-48; see also A154 (Figure 1).

The Board correctly held the claims at issue obvious, even accounting for the narrower construction advanced by Man Machine. Its decision should be affirmed.

V. CONCLUSION

Substantial evidence supports the Board's decision, and the Board correctly applied the law to the question of obviousness. For the foregoing reasons, the Board's decision should be affirmed.

Respectfully submitted,

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/s/ Jeremiah S. Helm THOMAS W. KRAUSE Acting Solicitor

JEREMIAH S. HELM FARHEENA Y. RASHEED Associate Solicitors

Mail Stop 8 P.O. Box 1450 Alexandria, VA 22313-1450 (571) 272-9035

Attorneys for the Director of the United States Patent and Trademark Office

CERTIFICATE OF SERVICE

I certify that on July 27, 2015, I electronically filed the foregoing Brief for Appellee – Director of the United States Patent and Trademark Office using the Court's CM/ECF filing system, which constitutes service, pursuant to Fed. R. App. P. 25(c), Fed. Cir. R. 25(a), and the Court's Administrative Order Regarding Electronic Case Filing 6(A) (May 17, 2012).

/s/Jeremiah S. Helm Jeremiah S. Helm Associate Solicitor Mail Stop 8, P.O. Box 1450 Alexandria, VA 22313-1450 (571) 272-9035